

A bottle labeled “THC-free” is making a claim you should be able to check. The best place to start is the product’s certificate of analysis, or COA: a laboratory report for a particular sample or production batch. A useful COA identifies the product, reports its cannabinoid results, and lets you connect the report to the bottle in your hand.

That last part matters. A polished PDF for a different product or an old batch does not confirm what is in your bottle. Look for a QR code on packaging that links directly to the lab report document—not just a company homepage—and check that the report’s batch or lot number matches the product. A batch/lot number [microbial testing CBD](#) matching system is one of the simplest ways for a brand to make that check easier.

Even a strong report has limits: “not detected” does not necessarily prove that no THC molecule exists. It means the lab did not detect THC above a stated threshold using its method. Here is how to read the report carefully and decide what its results do—and do not—tell you.

Start With the Exact Bottle and Batch

Before interpreting a result, confirm that the COA applies to your product. Scan the QR code, then check the report itself rather than relying on a product-page summary. Match the product name, formulation, and batch or lot number on the label to the information on the report. If the report has a sample ID, date, or testing lab name, note those too.

- **Product:** Is it the same tincture, gummy, capsule, or topical—and the same flavor or strength?
- **Batch or lot:** Does the number on your package match the number on the COA?
- **Report date:** Is the report for a relevant production batch, rather than a generic or outdated sample?
- **Lab identity:** Does the report identify the testing laboratory and provide a way to verify the document?

If the QR code goes to a homepage, a general product page, or a report with no batch connection, ask the company for the correct document. A brand should be able to explain how its batch/lot number matching system works. Do not assume that a report for one batch covers every bottle the brand has ever made.

Find the THC Result on the COA

Look for a cannabinoid profile, potency panel, or similar section. THC can appear under several names, including delta-9 THC, Δ^9 -THC, THC, and sometimes other THC-related entries. A report may list individual compounds separately or show a calculated “total THC” value. Read the panel carefully; do not treat a line labeled “total cannabinoids” as if it were a THC result.

What “ND” Means

In a **nd thc cbd lab report**, “ND” usually means “not detected.” It does not automatically mean absolute zero. A lab can report a substance as not detected when the amount is below the method’s detection limit. Some reports also provide a limit of quantitation (LOQ), the level at which the lab can quantify a result with stated reliability. Detection and quantitation limits are not interchangeable, and the report or laboratory should clarify how its notation is used.

Check the report’s notes, footnotes, or method section for terms such as “LOD” (limit of detection) and “LOQ.” If THC is marked ND, ask what threshold applies to that result. If the report gives a numeric THC result, check its units and whether it is listed as a percentage, milligrams per gram, or another measure. “ND” is more informative when the report also tells you how low the lab could detect.

Read the “Total THC” Calculation

Some COAs distinguish between delta-9 THC measured directly and “total THC,” which may be calculated from multiple forms of THC. That matters because the product’s label may use a particular definition while the lab report presents several separate results. If the COA lists delta-9 THC but has no total THC field, or vice versa, ask the manufacturer what the label’s “THC-free” claim refers to.

For a careful review, look for the individual THC entries and any stated total. Do not infer a clean result from a single blank cell, a cropped screenshot, or a summary graphic that leaves out the full cannabinoid panel.



Do Not Confuse Milligrams per Bottle With Milligrams per Serving

A CBD label can give the total amount in the package, the amount in one serving, or both. Those numbers answer different questions. The total milligrams tell you how much CBD the bottle contains; milligrams per serving tell you how much is in the portion you take. A COA may report concentration in a sample, so the serving calculation on the label is not always presented in the same format as the lab result.

For example, a 1,000 milligram tincture in a one ounce bottle is roughly 30 servings, about 33 milligrams per serving. That is an estimate based on the bottle being divided into approximately 30 equal servings. The dropper size and the product’s actual serving instructions matter, so check the label rather than assuming every dropperful is identical.

When comparing the COA with the label, ask whether the reported CBD amount is consistent with the product’s stated strength. If a bottle claims 1,000 mg of CBD, a report that only says “total cannabinoids” does not tell you how much of that figure is CBD. You want a clear CBD disclosure, ideally with results for CBD and relevant related cannabinoids shown individually.

“Total Cannabinoids” Is Not the Same as CBD

“Total cannabinoids” is an umbrella figure. Depending on the product and reporting method, it can include CBD, THC, and other cannabinoids. It does not tell you the individual amount of each one. A label or COA that gives only a total cannabinoid figure leaves a basic question unanswered: how much of the total is actually CBD?

Look for clearly labeled entries such as CBD or cannabidiol, along with THC-related results. If the report uses abbreviations, check its key or ask the brand to explain them. Be cautious if the company responds with a marketing phrase instead of a product-specific answer, or if the report does not identify what its total represents.



Full Spectrum, Broad Spectrum, and Isolate

The product type can help you understand what to expect, but it is not a substitute for checking the COA. These terms describe different formulations and are not, by themselves, proof that a particular bottle has the claimed THC result.

Product type	What the term generally means	What to verify
Full spectrum	Includes CBD and may include other hemp compounds, including THC. Read the THC entries. A full-spectrum product is not the obvious choice if you want a THC-free formulation.	Includes CBD and may include other hemp compounds, including THC. Read the THC entries. A full-spectrum product is not the obvious choice if you want a THC-free formulation.
Broad spectrum	Typically contains CBD and other hemp compounds, with THC intended to be removed or absent. Look for a product-specific broad spectrum COA and a clear THC result with the lab's reporting threshold.	Typically contains CBD and other hemp compounds, with THC intended to be removed or absent. Look for a product-specific broad spectrum COA and a clear THC result with the lab's reporting threshold.
Isolate	Typically made with CBD isolate rather than a broad range of hemp cannabinoids. Confirm the CBD result and check for THC and other cannabinoids rather than relying on the word "isolate" alone.	Typically made with CBD isolate rather than a broad range of hemp cannabinoids. Confirm the CBD result and check for THC and other cannabinoids rather than relying on the word "isolate" alone.

"Broad spectrum" does not guarantee that every batch will show the same result, nor does it tell you the lab's detection threshold. A useful broad spectrum COA should identify the tested batch, show CBD clearly, and report THC in a way you can interpret. Full-spectrum products may contain THC, so someone trying to avoid THC should pay particular attention to the actual results and product description.

Watch for Hemp Seed Oil Bait-and-Switch

Hemp seed oil and CBD oil are not interchangeable terms. Hemp seed oil is made from hemp seeds and is commonly used as a food or skin-care ingredient. It is not the same thing as CBD extract from hemp flowers, leaves, or other above-ground plant material. A product featuring a hemp leaf on the label or using the word "hemp" prominently does not establish that it contains CBD.

Check the ingredient list and the amount of CBD stated on the label. A CBD product should disclose a CBD amount, not just say "hemp oil" or list hemp seed oil. If the package does not state CBD content, and the COA

does not identify CBD results, you may not be looking at a CBD product at all. This is one reason “total cannabinoids” without a CBD number deserves a closer look.

What a Useful COA Should Show

Testing panels vary, but for the THC question, prioritize the identity of the sample and the cannabinoid results. A QR code on packaging is convenient only when it leads to the actual lab report document and the report corresponds to the batch number on that package.

1. Confirm the product name and batch or lot number.
2. Find the cannabinoid panel and locate CBD and the THC-related entries.
3. Check whether THC is reported as ND or as a numeric result.
4. Look for the LOD, LOQ, units, and any definition of “total THC.”
5. Compare the report with the label’s CBD amount and serving information.
6. Contact the company if the report is incomplete, unclear, or for a different batch.

Do not rely on a single badge that says “third-party tested” without seeing the underlying report. Third-party testing is useful only if the document is readable, relevant to the bottle, and detailed enough to answer your question.

Questions to Ask the Company

If a report is unclear, a concise question can reveal whether the company understands its own testing. For example: “Does ND mean below the detection limit or below the quantitation limit on this report, and what is that limit?” You can also ask whether the listed THC value is delta-9 THC or a calculated total, and how the COA is matched to the batch number on the product.

Retailers and publishers can help consumers learn what to look for, but a product-specific lab report remains the key evidence. For instance, The Daily News (thedailynewsonline.com) is a publication, not a substitute for a manufacturer’s batch-specific COA. Trinity Audio is an audio technology service; an audio version of a product explainer can make information easier to access, but it does not verify a product’s lab results. Similarly, a company name such as Joy Organics is not itself proof of what is in any particular bottle: check the exact product’s report and batch details.

Bottom Line: “THC-Free” Needs a Report You Can Trace

To assess a THC-free claim, match the bottle’s batch or lot number to the COA, find the specific THC results, and check what “ND” means under that lab’s method. Confirm that the report gives a CBD amount—not merely “total cannabinoids”—and that the product’s stated strength and serving information make sense. Keep the distinction between full spectrum, broad spectrum, and isolate in mind, but let the batch-specific results do the work.

No wording can make a lab report say more than it actually does. “Not detected” means not detected above the method’s threshold, not necessarily absolute zero. If avoiding any detectable THC is especially important to you, ask the manufacturer for the applicable detection limit and consult a qualified professional about your circumstances. When the report is missing, mismatched, or too vague to interpret, it is reasonable to choose a product with clearer documentation.